

## Version with Markings to Show Changes Made

### In the Claims

1. (TWICE AMENDED) A method for producing a solid sustained-release [microsphere] preparation, which comprises freeze-drying a sustained-release [microsphere] microcapsule preparation in a freeze-drying container of which the inner face is partially or wholly coated with an ice layer or water-repelling base material.

13. (ONCE AMENDED) A method for producing a sustained-release preparation comprising:

freezing water in a freeze-drying container having an inner face to form an ice layer which wholly or partially coats said inner face of said freeze-drying container;

adding a sustained-release microcapsule preparation suspension to said ice layer;

freezing said sustained-release microcapsule preparation suspension over said ice layer to form a sustained-release preparation layer;

sublimating water from said ice layer and said sustained-release preparation layer;

and then,

recovering a sustained-release preparation from said freeze-drying container.

## **REMARKS**

### **I. Amendments**

Claims 1 and 13 have been amended and claims 9, 15 and 17 have been canceled by this amendment.

This amendment adds no new matter to the specification. Support for this amendment is found in the specification and claims as filed.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached pages are captioned "Version with Markings to Show Changes Made".

No change of inventorship is necessitated by this amendment.

### **II. Discussion of the Rejection under 35 U.S.C. Sec. 102(b)**

Claims 1, 3-5, 8-10, 13, 15 and 17 have been rejected under 35 U.S.C. Sec. 102(b) as being unpatentable over Ueda *et al.* (EP 0 394 050 A2). Applicants disagree that the cited reference anticipates their invention as set forth in the claims as amended, for the present method produces a sustained-release preparation without scattering that preparation. By contrast, the process described in the art leads to undesirable scattering of the product, as is proven in the Mukai Declaration which accompanies this amendment. This fact is significant, as when scattering occurs, the final product cannot be recovered efficiently. Thus, Applicants' methods are not anticipated by the cited art, as explained in greater detail in the subsequent paragraphs.

By this amendment, claims 1 and 13 have been amended to indicate that the preparation is a microcapsule preparation. This amendment adds no new matter to the specification, as support for the amendment may be found *inter alia* at page 5, lines 11-14. The amendment of these claims has been made to limit them to the scope supported by the Mukai Declaration.

In the Mukai Declaration, a comparative test is provided which demonstrated that Applicants' method provides a result which is not attained when a method of the cited art is utilized. Undesirable scattering of the product occurs when a solution is freeze-dried as in the cited art, while no undesirable scattering occurs with Applicants' method, wherein

microcapsules are freeze-dried. This advantage of Applicants' method is disclosed at page 22, lines 12-21 of the specification *inter alia*.

Experimental Example 1 of the Mukai Declaration illustrates the method of the cited art. In the Example, a mannitol solution was freeze-dried on a tray comprising an ice layer between the walls of the tray and the mannitol solution. After freeze-drying, the mannitol powder was scattered and consequently was difficult to recover. Experimental Example 2 of the Mukai Declaration is representative of the methods of the present invention, wherein microcapsules were utilized to make a sustained-release preparation. In contrast to the results obtained by the method disclosed in the cited art, Experimental Example 2 shows that no undesirable scattering occurred with the method of the present invention. Therefore, Applicants do not believe that their invention, as set forth in independent claims 1 and 13 is anticipated by the cited reference.

Claims 3-5 and 8 depend upon claim 1. Applicants submit that these more specific dependent claims are also not anticipated by the cited reference for the reason provided above.

Claims 9, 15 and 17 have been cancelled.

Claim 10, as amended, depends upon independent claim 2. Since claim 2 has not been rejected by the Examiner as anticipated by the cited reference, Applicants submit that the more specific dependent claim is also not anticipated by the cited reference.

Therefore, Applicants respectfully request withdrawal of the Sec. 102 (b) rejection.

### **III. Discussion of the Rejection under 35 U.S.C. Sec. 103(a)**

Claims 1-6, 8-10 and 13-22 have been rejected under 35 U.S.C. Sec. 103(a) as being unpatentable over Ueda *et al.* (EP 0 394 050 A2).

By this amendment, claims 1 and 13 have been amended to indicate that the preparation is a microcapsule preparation. Microcapsule preparations are not disclosed in the cited reference. Applicants submit that their invention, as set forth in independent claims 1 and 13 as amended is not obvious over the cited reference. Applicants hereby incorporate their argument made in Section II above, which they believe to be equally applicable and convincing with respect to the obviousness rejection.

Claims 3-6 and 8 depend upon claim 1. Applicants submit that these more specific dependent claims are also not obvious in light of the cited reference for the reason provided above.

Claims 9, 15 and 17 have been cancelled.

Independent claims 2, 14 and 20 specify a coating of a water-repelling base material for the inner face of a freeze-drying container, which is not disclosed in the cited art, as the Examiner has already recognized. Furthermore, Applicants do not believe that the limitation in their method claims for a water-repelling base material coating on the inner face of the freeze-drying container of the present invention is taught or suggested by the cited art, as explained in greater detail below.

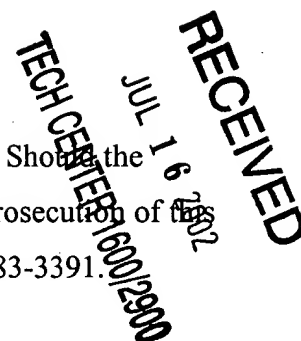
It appears that the Examiner may have equated the Applicants' coated water-repelling base material with the "second liquid" taught by the cited art. However, in the cited reference, a second liquid of the cited art is freeze-dried together with a first liquid to form a two-component product, as those skilled in the art would recognize upon a reading of the cited reference. By contrast, the water-repelling base materials of the present invention are coatings for the containers, not components to be freeze-dried. Applicants' water-repelling base materials are disclosed on page 18, lines 13-24 of the specification. One skilled in the art would recognize that such materials would remain in the container, and would not be intended to be part of any freeze-dried product. Therefore, the limitation of the water-repelling base material is neither taught nor suggested by the "second liquid" of the cited art. Therefore, Applicants do not believe their methods, as set forth in independent claims 2, 14 and 20 are obvious in light of the cited reference, which does not teach or suggest a water-repelling base material.

Claims 3-6, 8 and 10 depend upon claim 2, claims 16, 18 and 19 depend upon claim 14 and claims 21 and 22 depend upon claim 20. Applicants submit that these more specific dependent claims are also not rendered obvious by the cited reference for the reason provided above.

Claims 9, 15 and 17 have been cancelled.

Therefore, Applicants respectfully request withdrawal of the Sec. 103(a) rejection.

IV. Conclusion



Reconsideration of the claims as amended and allowance is requested. Should the Examiner believe that a conference with Applicants' attorney would advance prosecution of this application, she is respectfully requested to call Applicants' attorney at (847) 383-3391.

Respectfully submitted,

Dated: July 9, 2002

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